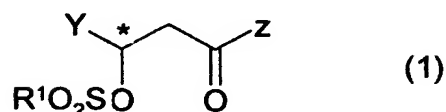


CLAIMS

1. A production method characterized in that optically active active sulfonate compounds represented by the following general formula (1)



[in this formula, Y indicates an optionally substituted methyl group or aryl group, Z stands for a hydroxy group, optionally substituted amino group, optionally substituted alkoxy group or optionally substituted aryloxy group, R¹ represents an optionally substituted alkyl group with a carbon atom number from 1 to 10, an optionally substituted aryl group with a carbon atom number from 6 to 15, an optionally substituted aralkyl group with a carbon atom number from 7 to 20. Further, * indicates an optically active carbon atom, in the R or S configuration]

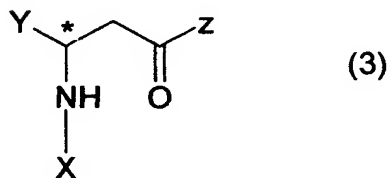
are reacted with an aromatic amine represented by the following formula (2)



[in this formula X stands for an optionally substituted aryl group with a carbon atom number from 6 to 15 or an optionally substituted heteroaromatic group with a carbon atom number from 3 to 15.]

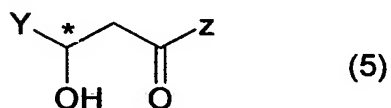
to produce the optically active N-aryl-β-amino acid compounds represented

by the following formula (3).



[in this formula X, Y, Z and * have the same meaning as described above.]

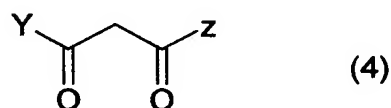
2. A production method as claimed in claim 1 comprising a process, in which by the reaction of optically active β -hydroxycarboxylic acid compounds represented by the following formula (5)



[in this formula, Y, Z and * show the same meaning as described above.]

with sulfonyl chlorides or sulfonic acid anhydride, the optically active sulfonate compounds represented by the above described formula (1) are manufactured.

3. A production method as claimed in claim 2 comprising a process, in which by the asymmetric reduction of β -keto carboxylic acid compounds represented by the following formula (4)



[in this formula, Y and Z have the same meaning as described above.]

in the presence of a catalyst or enzyme, the optically active β -hydroxycarboxylic acid compounds represented by the above described formula (5) are manufactured.

4. A production method for the optically active N-aryl- β -amino acid compounds as claimed in any of the claims 1 to 3 characterized in that R^1 in the sulfonate compounds, represented by the above described formula (1), is a trifluoromethyl, methyl or p-tolyl group.

5. A production method for the optically active N-aryl- β -amino acid compounds as claimed in claim 4 characterized in that R^1 in the sulfonate compounds, represented by the above described formula (1), is trifluoromethyl.

6. A production method for the optically active N-aryl- β -amino acid compounds as claimed in any of the claims 1 to 5 characterized in that in the sulfonate compounds, represented by the above described formula (1), the relevant sulfonyl group is introduced by using trifluoromethanesulfonic acid anhydride as a sulfonylation agent and that R^1 is a trifluoromethyl group.

7. A production method for the optically active N-aryl- β -amino acid compounds as claimed in any of the claims 1 to 6 characterized in that the relevant reaction is carried out at a temperature of 5°C and less.